



Note

Record of deep-sea lobster *Palinustus waguensis* Kubo, 1963 (Decapoda: Palinuridea) from southern coast of Oman in the Arabian Sea

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ABSTRACT

Deep sea lobster *Palinustus waguensis* Kubo, 1963, was recorded in the southern Omani coast in Dhofar region in the Arabian Sea for the first time. On 18 October 2021, a single male specimen was captured in a fish cage trap at 230 m depth about 600 m off Mirbat area in the Arabian Sea. The specimen measured 117.63 mm in total length, 41.63 mm carapace length and weighed 65.84 g. The findings of the present record expand the distribution of this lobster species in the Omani coastline and the south-west of the Arabian Sea.

Keywords: Arabian Sea, Deep sea lobster, Oman, *Palinustus waguensis*

The lobsters belonging to the genus *Palinustus*, mainly inhabit deep continental slopes and are generally uncommon and difficult to find (Chan and Yu, 1995). One of five species belonging to this genus, the Japanese blunthorn lobster *Palinustus waguensis* Kubo, 1963, has been frequently reported from the Indo-West-Pacific (Chesalin *et al.*, 2021). This deep sea lobster was first reported in the Omani waters in the Sea of Oman near Shinas area in 2015 (Chesalin *et al.*, 2021) and off Muscat (Seeb area) in 2018 (Al-Kharusi *et al.*, 2019). The distribution of this species in the Arabian Sea was first recorded in 1965 off Mangalore coast along the south-west of India (Purushottama and Saravanan, 2014) and more recently off Kollam area, also on the south-west coast of India (Chakraborty *et al.*, 2021). The present paper reports the occurrence of *P. waguensis* in the southern Oman coastline in Dhofar region in the south-west of the Arabian Sea.

On 18 October 2021, a single male specimen of *P. waguensis* was caught in fish trap at 230 m, about 600 m off Ain area in Mirbat in the Arabian Sea at 16°57'41.3"N; 54°52'44.3"E. The specimen was brought live to the laboratory at Mirbat Aquaculture Station, Mirbat, Sultanate of Oman, for measurement and identification following Chan and Yu (1995).

The collected lobster was identified as *Palinustus waguensis* Kubo, 1963 based on the description by Chan and Yu (1995). It was a male of 117.63 mm total length, 41.63 mm carapace length and weighed 65.84 g. The body was heavily pubescent, equipped with rows of well-developed spines alongside edges of the carapace (Fig. 1). The colouration of the body, including pleopods, was generally orange to light-reddish. Anterior margin of

carapace without a median spine. Frontal horns broad, bluntly truncated horns with 4 spines on the inner margin and a single strong spine present on the external margin of both horns. Total number of 6 distinct spines on frontal margin of carapace centered between frontal horns (Fig. 1). Epistome with 4 spinules on anteromedian margin. Antennal peduncle (29.15 mm) shorter than first segment of antennular peduncle (41.52 mm), whereas antennal flagella (130.14 mm) longer than total body length (117.63 mm). Both antennal and branchiostegal spines higher in length than postorbital spine. All abdominal segments with a pair of spines (Fig. 1), a feature which was reported by Chakraborty *et al.* (2016).

All specimens of *P. waguensis* found in Oman were collected from depths ranging between 70-230 m. Several records from different countries reported the capture of *P. waguensis* in deep waters in the Indian Ocean. For example, records from India reported the collection of *P. waguensis* from a depth range of 200-250 m from Mangalore and Kollam on the south-west coast (Chakraborty *et al.*, 2019).

At present, it is unlikely that there is any commercial fishery for this lobster (Chesalin *et al.*, 2021), although an unusual landing of 100 kg of *P. waguensis* by deep sea shrimp trawlers was reported from Kollam, Kerala coast, India in 2019 and was sold for domestic consumption (Chakraborty *et al.*, 2021). The specimens of *P. waguensis* in Omani waters were caught accidentally by non-selective fishing gears (bottom gillnets or fish traps) in deep waters, indicating that this lobster is an untargeted bycatch species in the fishery.



Fig. 1. *P. waguensis*, male, from the Arabian Sea, southern coast of Oman

This record reports the first occurrence of *P. waguensis* in the Arabian Sea in Oman and documents its natural distributional range to the south-west of the Arabian Sea.

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